

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (Currently Amended) A method of detecting or differentiating rheumatoid arthritis, comprising:

measuring the level of human lipocalin-type prostaglandin D synthase (L-PGDS) in a sample collected from a subject suspected of having rheumatoid arthritis ~~free of renal disease and/or ischemic heart disease;~~

comparing the measured level of human L-PGDS with a predetermined cut-off value based on (i) measurements of human L-PGDS in samples collected from healthy volunteers and/or patients with joint diseases other than rheumatoid arthritis, and (ii) measurements of human L-PGDS in samples collected from rheumatoid arthritis patients; and

detecting or differentiating rheumatoid arthritis if the level of L-PGDS is ~~higher~~ in the sample collected from the subject ~~free of renal disease and/or ischemic heart disease~~ suspected of having rheumatoid arthritis ~~is higher than it is in a healthy volunteer and/or in a patient with a joint disease other than rheumatoid arthritis~~ the predetermined cut-off value.

2. (Cancelled)

3. (Currently Amended) A method of determining the stage of disease with regard to rheumatoid arthritis, comprising:

measuring the level of human L-PGDS in a sample collected from a subject ~~free of renal disease and/or ischemic heart disease~~ having rheumatoid arthritis or suspected of having rheumatoid arthritis;

comparing the measured level of human L-PGDS with a predetermined cut-off value based on measurements of human L-PGDS in samples collected from rheumatoid arthritis patients classified in accordance with the stage of disease; and

determining the stage of disease with regard to rheumatoid arthritis, wherein L-PGDS concentration increases with advancement of the stage of disease.

4. (Cancelled)

5. (Currently Amended) A method of determining the degree of dysfunction or severity with regard to rheumatoid arthritis, comprising:

measuring the level of human L-PGDS in a sample collected from a subject having rheumatoid arthritis or suspected of having rheumatoid arthritis free of renal disease and/or ischemic heart disease;

comparing the measured level of human L-PGDS with a predetermined cut-off value based on measurements of human L-PGDS in samples collected from rheumatoid arthritis patients classified in accordance with the degree of dysfunction or severity; and

determining the degree of dysfunction or severity with regard to rheumatoid arthritis, wherein L-PGDS concentration increases with advancement of the degree of dysfunction or severity.

6. (Cancelled)

7. (Previously Presented) The method according to claim 1, wherein the level of human L-PGDS in a sample is measured by immunoassay.

8. (Previously Presented) The method according to claim 1, wherein the sample is a body fluid.

9. (Previously Presented) The method according to claim 1, wherein the sample is a joint fluid.

10. (Previously Presented) The method according to claim 1, wherein the sample is urine or blood.

11. – 14. (Cancelled)

15. (Currently Amended) The method according to claim [[2]] 1, wherein the cut-off value is the upper limit of a reference interval obtained by the following equation: mean value  $\pm \sigma \times$  standard deviation ( $\sigma = 0.5, 1, 2, 3, \text{ or } 5$ ).

16. (Currently Amended) The method according to claim [[4]] 3, wherein the cut-off value is the upper limit of a reference interval obtained by the following equation: mean value  $\pm \sigma \times$  standard deviation ( $\sigma = 0.5, 1, 2, 3, \text{ or } 5$ ).

17. (Currently Amended) The method according to claim [[6]] 5, wherein the cut-off value is the upper limit of a reference interval obtained by the following equation: mean value  $\pm \sigma \times$  standard deviation ( $\sigma = 0.5, 1, 2, 3, \text{ or } 5$ ).